

# MNMF Fatal 2006-23

- Electrical
- October 12, 2006 (Minnesota)
- Taconite Operation
- Maintenance Coordinator
- 24 years old
- 16 months experience

# Overview

The victim was fatally injured when an electrical short occurred in a ball mill starter circuit. He was troubleshooting an electrical problem in the motor ladder start-up sequence for the No. 4 ball mill electrical motors. An air-magnetic circuit breaker that provided over current protection to the circuit failed, resulting in a sustained arc-flash.



# Root Causes

- Management policies and controls were inadequate. There were no procedures requiring the circuit breakers to be examined and tested periodically to ensure these over-current protective devices functioned properly.
- Management failed to recognize the potential hazard of not providing over-current protective devices on all electrical circuits.

# Best Practices

- **Before YOU perform any electrical work or troubleshooting:**
  - Periodically calibrate and maintain circuit protective devices to ensure they operate properly under fault conditions.
  - Wear the proper Personal Protective Equipment (PPE), such as fire resistant clothing, hoods, face shields and gloves, which are designed to protect against electrical arc flashes (as per NFPA 70E).
  - Stop, Look, Analyze, and Manage (SLAM) each task to identify all potential hazards before performing work.